



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,703	01/29/2002	Jens Cierullies	US 20 01 0487	5952

7590 11/04/2003

Paul D. Greeley, Esq.  
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
10th Floor  
One Landmark Square  
Stamford, CT 06901-2682

EXAMINER

LYONS, MICHAEL A

ART UNIT PAPER NUMBER

2877

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/059,703

Applicant(s)

CIERULLIES ET AL.

Examiner

Michael A. Lyons

Art Unit

2877

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 37-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group I, comprising claims 1-36 in Paper No. 7 is acknowledged. The traversal is on the ground(s) on the basis that the public interest and economy are best served by a full examination of all of claims 1-40 in a single application. This is not found persuasive because as explained in the original restriction action, the group of claims 1-36 fails to require interferometry to determine any desired properties. The lack of interferometry therefore requires a different search of different material, causing the inventions to be distinct.

The requirement is still deemed proper and is therefore made FINAL.

### ***Drawings***

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 28 in Figure 2. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2877

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 1-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.** The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 is based on the prior art apparatus as disclosed in Figure 1 and the corresponding section of the specification. Claim 10 is based on the inventive apparatus as disclosed in Figure 2 and the corresponding section of the specification. However, as written, it is first unclear, in claims 1, 30, and 36, as to how the first initial light beam has its first initial property changed. Additionally, it is unclear as to how the apparatus of Figure 2, claim 10, and the corresponding related, but not necessarily directly dependant, claims (for example, claims 3, 6, 11, 14, and so on) and their method will properly function in conjunction with claim 1. At the end of the method of claim 1, the initial light beam has become an electric signal after detection, and a non-linearity of the signal has been corrected. Following from claim 10, the first initial light beam, supposedly a signal as in claim 1, is split into a first light beam and a second light beam. It is unclear as to how the method steps of claim 10 can be used following the method steps of claim 1 to enable proper operation of the claimed invention. Therefore, the above claims, as written, fail to enable the device so that one of ordinary skill in the art can apply the claimed method to the specified apparatus with the proper results. Furthermore, it is unclear as to how the derivations and corrections and other mathematical operations that are disclosed in claims directly dependent on claim 1 can be performed on a lone signal passing through a device under test.

Art Unit: 2877

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim 3 recites the limitation "the first resulting property simultaneously with the second resulting property" in line 2. There is insufficient antecedent basis for this limitation in the claim. What resulting properties are being claimed here?

Claim 8 recites the various limitations based around "the first signal" and "the second signal" throughout the claim. There is insufficient antecedent basis for this limitation in the claim. What signals, such as "the first signal in a number of phase signals over a linear scale" are being referred to?

Claim 18 recites the limitation "the chromatic dispersion coefficient" in line 5. There is insufficient antecedent basis for this limitation in the claim. What chromatic dispersion coefficient is being referred to here?

Claim 23 recites the limitation "the polynomial" in line 2. There is insufficient antecedent basis for this limitation in the claim. What polynomial is being claimed here?

Art Unit: 2877

Claim 26 recites the limitation "the maximum and the minimum" in line 4. There is insufficient antecedent basis for this limitation in the claim. What maximum and minimum is being referred to?

Claim 28 recites the limitation "the maximum of the Fourier transformed signal of the first signal" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim. What maximum is being referred to here?

Claim 34 recites the limitation "the maximal range" in line 3. There is insufficient antecedent basis for this limitation in the claim. What maximal range is being referred to?

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Lyons whose telephone number is 703-305-1933. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G Font can be reached on 703-308-4877. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0935.

MAL  
October 30, 2003



**Samuel A. Turner**  
Primary Examiner